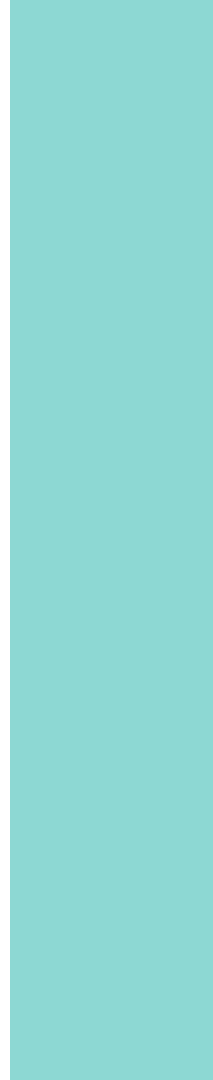
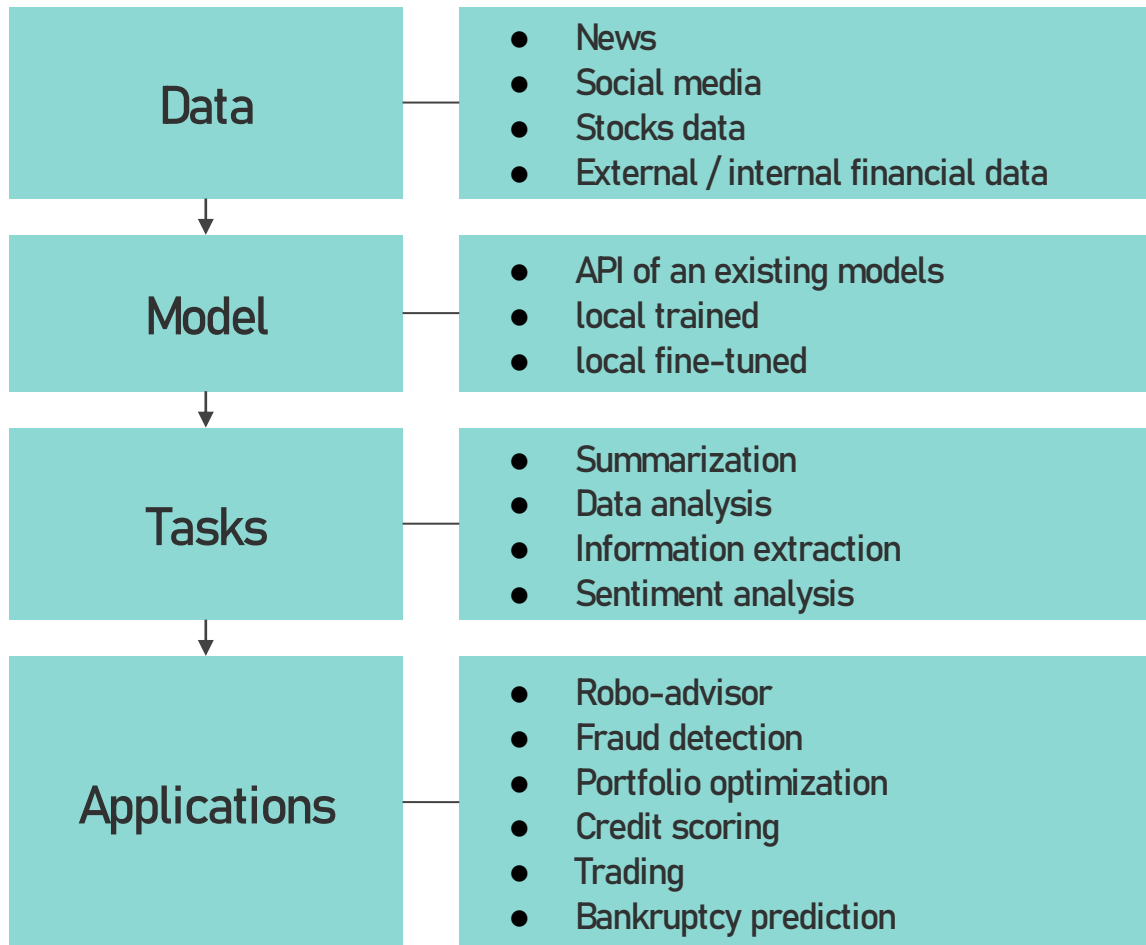


Large language models in finance

by Serhii Kanyhin



General framework for LLM in Finance



LLM Implementation approaches

Using an API of an existing models

Fine-tuning locally

Training from scratch

Lower cost

Higher cost

FinGPT fine-tuned versions of open-source LLMs

Base Model	Pretraining Tokens (T)	Context Length (Ths)	Model Advantages	Model Size (B of params)	Experiment Results	Applications
Llama-2	2	4	Llama-2 excels on English-based market data	7 / 13	Consistently good results	Financial Sentiment Analysis, Robo-Advisor
Falcon	1,5	2	Maintains high-quality results while being more resource-efficient	7	Effective for US/EU market	Financial Sentiment Analysis
MPT	1	2	MPT models can be trained with high throughput efficiency and stable convergence	7	Effective for US/EU market	Financial Sentiment Analysis
Bloom	0,366	2	World's largest open multilingual language model	7	Effective for US/EU market	Financial Sentiment Analysis
ChatGLM2	1,4	32	Exceptional capability for Chinese language expression	6	Effective for China market	Financial Sentiment Analysis, Financial Report Summary
Qwen	2,2	8	Fast response and high accuracy	7	Effective for China market	Financial Sentiment Analysis
InternLM	1,8	8	Can flexibly and independently construct workflows	7	Effective for China market	Financial Sentiment Analysis

Source: <https://github.com/AI4Finance-Foundation/FinGPT>

Takeaways about LLMs in finance



Versatile data integration



Flexible model deployment



Advanced analytical capabilities



Wide-ranging applications

Thanks!

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